

# **GMC**

**GLOBAL MACHINERY COMPANY**

**INSTRUCTION MANUAL**

# **REDEYE<sup>®</sup>**

***Self Leveling  
Vertical Line  
Generator***



- *Melbourne • Perth*
- *Auckland • Hong Kong*
- *Shanghai • Taipei*
- *New York • Verona*
- *London • Paris*

**2** YEAR  
REPLACEMENT  
WARRANTY

**30** DAY  
SATISFACTION  
GUARANTEE

**LSSLV**

040702 E004 5F

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## Full 2 Years Home Use Warranty

Whilst every effort is made to ensure your complete satisfaction with this tool, occasionally, due to the mass manufacturing techniques, a tool may not live up to our required level of performance and you may need the assistance of our service department.

This product is warranted for a 2-year period for home domestic use from the date of the original purchase. If found to be defective in materials or workmanship, the tool or the offending faulty component will be replaced free of charge with another of the same item. A small freight charge may apply.

The warranty replacement unit is only made available by returning the tool to the place of purchase with a confirmed register receipt. Proof of purchase is essential. We reserve the right to reject any claim where the purchase cannot be verified.

This warranty does not include damage or defects to the tool caused by or resulting from abuse, accidents, alterations or commercial or business use.

It also does not cover any bonus accessories unless the tool is a GMC Platinum Professional model.

Please ensure that you store your receipt in a safe place.

Conditions apply to the above warranty.

If you need direction of what constitutes a free of charge warranty claim, please review the guide given on the rear of the Receipt Holder. An indication is given as to the types of claim that are permissible, and those that are not.

## Dear Customer

If you require any help with your product, whether it is a Warranty claim, spare part or user information, please phone our Help Line for an immediate response. Phone 1300 880 001 in Australia or 0800 445 721 in New Zealand.

## Introduction

Your new GMC laser hand tool will more than satisfy your expectations. It has been manufactured under stringent GMC Quality Standards to meet superior performance criteria.

You will find your new tool easy and safe to operate, and, with proper care, it will give you many years of dependable service.

**Caution.** Carefully read through this entire Instruction Manual before using your new GMC laser hand tool. Take special care to heed the Cautions and Warnings.

Your GMC laser hand tool has many features that will make your job faster and easier. Safety, performance, and dependability have been given top priority in the development of this tool, making it easy to maintain and operate.

## Environmental protection



Recycle unwanted materials instead of disposing of them as waste. All tools, hoses and packaging should be sorted, taken to the local recycling centre and disposed of in an environmentally safe way.

## Description of symbols

The rating plate on your tool may show symbols. These represent important information about the product or instructions on its use.



N380

Conforms to relevant standards for electromagnetic compatibility.



Do not stare into beam. Only turn laser beam on when tool is on work piece. Class 2 laser product.

## Specifications

Recommended Use:	Indoor
Length of laser line:	Up to 10m
Laser diode type:	Red laser diode 635 - 650nm
Laser class:	Class 2, maximum power output less than or equal to 1mW
Operation area:	Up to 10m distance
Laser fan beam angle:	100°
Self-leveling range:	+/- 3°
Leveling time:	<5 second
Vertical line accuracy (end to end):	+/-3.1mm at 4.8 metres
Line width accuracy:	<3.1mm at 4.8 metres
Power supply:	2 x AA 1.5 volt batteries (not supplied)
Battery life:	40 hours typical of continuous use with alkaline batteries
Operation temperature:	-1°C to 40°C

CAUTION. Laser radiation is emitted from the line generator.

## Safety rules for self leveling vertical line generators

The self leveling vertical line generator is Class 2 with maximum 1mW and 635 - 650nm wavelengths. These lasers do not normally present an optical hazard, although staring at the beam may cause flash blindness.

**Warning.** Do not stare directly at the laser beam.

A hazard may exist if you deliberately stare into the beam, please observe all safety rules as follows;

- The laser shall be used and maintained in accordance with the manufacturer's instructions.
- Never aim the beam at any person or an object other than the work piece.
- The laser beam shall not be deliberately aimed at personnel and shall be prevented from being directed towards the eye of a person for longer than 0.25s.
- Always ensure the laser beam is aimed at a sturdy work piece without reflective surfaces. I.e. wood or rough coated surfaces are acceptable. Bright shiny reflective sheet steel or the like is not suitable for laser use as the reflective surface could direct the beam back at the operator.
- Do not change the laser light assembly with a different type. Repairs must only be carried out by the laser manufacturer or an authorised agent.



**CAUTION:** Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Please refer to the relevant Australian standards, AS 2397 and AS/NZS2211 for more information on Lasers.

## Additional safety rules for self leveling vertical line generators

The self leveling vertical line generator emits a laser fan beam, which acts like an invisible surface in the actual three dimensions space. When used indoors, it generates a visible laser line on the surfaces the laser fan beam crosses.

The self leveling vertical line generator is a Class 2 laser tool and complies with Australian standards, AS 2397 and AS/NZS2211.

**WARNING.** Read and understand all instructions. Failure to follow all instructions may result in hazardous radiation exposure, electric shock, fire and/or bodily injury.

- Do not remove or deface any labels. Removing labels increases the risk of exposure to laser radiation.
- Do not stare directly at the laser beam as serious eye injury could result.
- Do not project the laser beam directly into the eyes of others.
- Do not place the laser in a position which may cause anyone to stare into the laser beam intentionally or unintentionally.
- Do not use optical tools such as a telescope or transit to view the laser beam.
- Do not operate the self leveling vertical line generator around children or allow children to operate the tool.
- Keep children and bystanders away while operating the self leveling vertical line generator.



- Turn the self leveling vertical line generator off when it is not in use. Leaving the laser on increases the risk of staring into the laser beam.
- Do not operate the self leveling vertical line generator in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.
- Position the self leveling vertical line generator securely. Damage to the self leveling vertical line generator or some injury could result if the unit falls.
- Use only accessories that recommended by the manufacturer for your model. Accessories that may be suitable for a specific laser line generator, may create a risk of injury when used on another self leveling vertical line generator.
- Repairs and servicing can be only performed by a qualified repair facility. Repairs performed by unqualified personnel could result in serious injury.
- Do not disassemble the self leveling vertical line generator. Disassembling the unit will void all warranties on the product.
- Do not disassemble any part of the product except removing the batteries cap when replacing batteries.
- Do not modify the product. Modifying the product in any way may result in hazardous laser radiation exposure.
- Use of control or performance of procedures other than those specified in this manual may result in hazardous laser radiation exposure.
- Keep work area clean and well lit. Cluttered and dark areas invite accidents.

## Know your product

This REDEYE® self leveling vertical line generator is a high quality tool. It can be leveled on a horizontal surface or tripod stand. It projects an vertical laser line.

This tool is easy to use in many applications from simple home decorating projects to house building. Every place it can project an vertical line adjusted automatically while it's placed on a horizontal surface.

This REDEYE® self leveling vertical line generator is not calibrated as a height measuring device and should not be used as such. It will give a reference mark when used as a hand-held tool.

1. On/Off switch
2. Bubble vial
3. Battery cover
4. Vertical adjusting dial
5. Laser aperture
6. Tripod mount



## Changing the self leveling vertical line generator batteries

1. Ensure that the self leveling vertical line generator is switched OFF by checking that the laser switch (1) is in the "0" position
2. Unclip the battery cover (3).
3. Remove and replace both AA batteries, taking care to insert the new batteries with the correct polarity.
4. Replace the battery cover (3) and shut the cover back to the position in place.

**CAUTION.** Remove the self leveling vertical line generator when the tool is to be stored without use for a few days or more. If left in position, the batteries might leak and damage the laser light assembly. Damage due to leaking batteries is not covered under warranty.



## Operating the self leveling vertical line generator

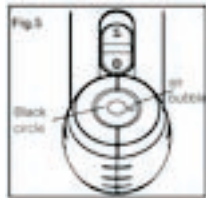
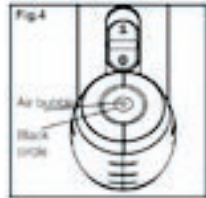
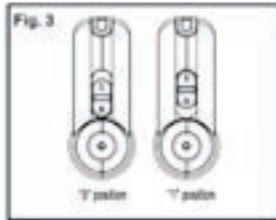
1. To switch the self leveling vertical line generator on, push the laser switch (1) forward until it stops in "1" position.
2. To switch the self leveling vertical line generator OFF, push the switch backward until it stops in "0" position.

**WARNING:** When turning on the self leveling vertical line generator ALWAYS be aware of protecting the eyes of yourself and those around you. NEVER point the self leveling vertical line generator at anyone's face, including your own.

Failure to heed this warning could result in serious injury.

Before using the self leveling vertical line generator, it is important to ensure that the unit is leveled.

1. Place the unit on a flat surface and check the bubble vial (2). If the air bubble is located inside the black circle, then you can proceed.



If the air bubble is outside of the black circle, follow these recommended adjustment steps:

- It is important to check if the unit has been placed on a level surface.

The diagrams below illustrate the correct positioning of the unit.

- If the unit is relatively flat, you can use the adjustment dial (4) to make adjustment only on the vertical plane.
- If the surface is not flat on a horizontal plain, you have a few options:
  - Use a flat piece of material (books, block of timber)
  - Use a tripod



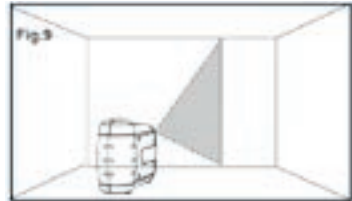
**Suggestion:** A tripod with an adjustable plate may be the best tool to use, to ensure the self leveling vertical line generator is in a level position.

**Caution:** Ensure the switch is in "0" position during adjustment.

### Projecting Level Vertical Laser Line

When the self leveling vertical line generator is located in level position:

- Ensure the laser aperture (5) of the tool faces the wall which will be used for projecting the laser "chalk line".
- Switch on the self leveling vertical line generator, you will see the vertical laser line swaying on the wall, whilst it automatically adjusts itself. This process will take approximately 5 seconds where you will see eventually a steady vertical laser "chalk line".
- Once the vertical laser "chalk line" has steadied, position the "chalk line" to your target position.



## Maintenance

This product has been designed to be a low-maintenance tool. However, in order to maintain its performance, you must **ALWAYS** follow these simple directions.

1. **ALWAYS** handle the tool with care. Treat it as you would any optical device, such as a camera or binoculars.
2. **AVOID** exposing the self leveling vertical line generator to shock, continuous vibration or extreme hot or cold temperatures.
3. **ALWAYS** store the self leveling vertical line generator indoors. When not in use, **ALWAYS** store the self leveling vertical line generator in its protective case.
4. When you are finished using the tool, **ALWAYS** make sure that the switch is in "0" position.
5. **ALWAYS** keep the product free of dust and liquids. Use a damp cloth and mild soap to clean the tool. If needed, **ONLY USE** a soft cloth or cotton swab and glass cleaner to clean the lens.

**WARNING: ALWAYS** remove the batteries when cleaning lens.

6. **ALWAYS** clean and thoroughly dry the tool after each use.
7. Check the batteries regularly to avoid deterioration. **ALWAYS** remove the batteries from the tool, if it is not going to be used for an extended period of time.
8. Replace the batteries after approximately 40 hours of use.
9. **DO NOT** disassemble the self leveling vertical line generator.. This will not only void the warranty, but could expose the user to hazardous radiation exposure.

10. **DO NOT** modify the tool in any way or use the tool with products and/or accessories not specified in this instruction manual, this could expose the user to hazardous laser radiation exposure.

11. **DO NOT** attempt to change any part of the laser lens.

**NOTE:** This tool is not to be tampered with and should only be repaired by a qualified Service Technician with laser experience.

## Troubleshooting

Problem	Possible cause	Solution
Laser line projection is weak.	Batteries are weak.	Replace with fresh batteries.
Laser line is hard to see	Light in area is too bright.	Use laser enhancing glasses.
	Batteries are weak.	Replace with fresh batteries.
Laser light is not projected.	Power switch is not "on"	Check to be sure the power switch has been pushed forward and is in the "1" position.
Laser line projected is not upright.	The tool is not placed on a horizontal surface or the declining angle of it is beyond $\pm 3^\circ$ .	Replace the tool on a horizontal surface and make sure the laser line can sway after the tool is turned on.



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## Carefully read the entire *Instruction Manual* before using this product.

**Before returning this product for a  
Warranty Claim or any other reason  
Please Call 1300 880 001 (Australia)  
or 0800 445 721 (New Zealand)**

**When you make your call, please have  
the following information at hand:**

- GMC Product Type
- GMC Product Code

A GMC Service Engineer will take your call and, in most cases, will be able to solve your problem over the phone.

You are welcome to use this phone-in service to make suggestions or give comments about any GMC product.

With continuing product development changes may have occurred which render the product received slightly different to that shown in this instruction manual. The manufacturer reserves the right to change specifications without notice. Note: Specifications may differ from country to country.



The GMC 777 Helpline operates from 7am to 7pm, 7 days a week (EST). This allows you to contact GMC directly with any queries and technical questions you have regarding our products.

**GMC**  
GLOBAL MACHINERY COMPANY

45-55 South Centre Road  
Melbourne Airport  
Victoria, Australia 3045  
Tel: (03) 8346 1100 Fax: (03) 8346 1200



*Save this Manual for future reference.*

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